REMARKS

The non-final Office Action of June 22, 2004, has been carefully reviewed, and these remarks are responsive thereto. Claims 1-16 remain pending. By this Amendment, claims 1, 2, 5, and 11, as well as Figure 1, are amended. No new matter is added.

The drawings are objected to for not including a reference to the emulation system 100 as disclosed in the specification. Applicants request that Figure 1 be amended as shown in the attached Appendix to refer to element 100. No new matter is added.

Best Mode Rejection Based on Statements Made About Another Applicant's Patent

Claims 1-16 are rejected under 35 U.S.C. § 112, first paragraph, due to an allegation in the Office Action that the best mode contemplated by the inventors has not been disclosed. The Office Action refers to Applicants' statements in paper 11, page 6, to support this rejection. This rejection is inexplicable. Applicants' referenced statements merely discuss what the *Barr reference* does or does not teach. Such statements on page 6 say nothing about what Applicants consider to be a best mode of *their own invention.*

According to the MPEP, unless the Examiner has evidence to the contrary, it must be assumed that the best mode, if any, is disclosed. (MPEP 2165.03). At a minimum, such contrary evidence must focus on the inventors' state of mind at the time the application was filed. (MPEP 2165.03). Again, the statements the Examiner refers to have nothing to do with Applicants' own invention at all, much less Applicants' state of mind at the time of filing. In this instance, the Examiner has provided no evidence that is relevant to the best mode requirement. Applicants therefore submit that this rejection has no basis and should be withdrawn.

Art-Based Rejections

Claims 1-7 and 11-13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,960,191 to Sample et al. ("Sample") in view of U.S. Patent No. 5,297,181 to Barr et al. ("Barr"). Claims 8-10 and 14-16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sample in view of Barr, and further in view of U.S. Patent No. 5,659,716 to Selvidge et al. ("Selvidge"). Applicants respectfully traverse all rejections.

Argument

All arguments made in paper no. 11 are hereby incorporated by reference in their entireties. Applicants particularly wish to emphasize that the Office Action continues to reject the claims over a proposed combination of three systems:

- Sample;

- the *system* of Barr (digital audio interface protocol); and

- the *prior art* to Barr (FM coding).

To set forth a *prima facie* case of obviousness, the Office Action must show that where was a motivation in the prior art to have combined these three systems as proposed. However, the Office Action continues to not set forth a motivation to combine the prior art to Barr with Barr's own system. It appears that the Office Action instead treats Barr and the prior art to Barr as a single system, which is incorrect.

Nevertheless, Applicants have amended the independent claims to further distinguish over the rejection and with the hope of quick allowance (Applicants presently intend to pursue the original claims in a continuing application). For example, claim 1 is amended to recite that each bit in the framing sequence and the data packet is transmitted *as a single level* over two transmit clock periods. Referring to Applicants' specification in Figure 2, for instance, each bit of data signal 202 is transmitted at either a high or low level for two clock periods of the transmit clock 201. As discussed next, the proposed combination of Sample and Barr does not achieve this claimed invention.

As best as the rejection can be understood, it appears that the Office Action proposes at least using an FM coding scheme (disclosed in the background of Barr) in Sample such that Sample would transmit one bit every two clock cycles. In contrast to amended claim 1, however, the FM coding scheme in Barr uses at least two levels for each bit. This is because each bit has at least one transition:

> In the FM modulation scheme, two transmit clock cycles are used to represent each serially transmitted data bit. A data '1' is represented by two channel transitions (two chanel '1s'), and a data '0' is represented by a single channel transition (single channel '1').

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(Barr, col. 2, lns. 44-47). Thus, the FM coding scheme discussed in Barr does not transmit each bit as a single level over two transmit clock periods as claimed, and the proposed modified version of Sample would likewise fail to have this claimed feature.

In addition, the alleged motivation for modifying Sample as proposed has no basis in fact or in law. The Office Action alleges that one would have looked in the high speed interface protocol art to reduce power consumption. However, there is no teaching that the proposed modification, i.e., using FM coding, reduces power consumption. Thus, there is simply no reason proposed by the Office Action, other than relying on improper hindsight, why one would have turned to FM coding in particular to modify Sample.

For at least these reasons, it is submitted that amended claim 1 is allowable.

Independent claims 2, 5, and 11 are also allowable for at least similar reasons as discussed above with regard to claim 1, and further in view of the differing features recited therein.
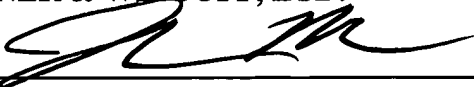
The dependent claims are also allowable for at least those reasons that their respective independent claims are allowable, and further in view of the additional features recited therein. Moreover, the proposed addition of Selvidge fails to cure the deficiencies of Sample and Barr as previously discussed.

Conclusion

All objections and rejections having been addressed, Applicants respectfully submit that the present application is in condition for allowance, and notification of the same is requested. The Examiner is invited to contact the undersigned at the number below should the Examiner feel that an interview would expedite prosecution. Please charge any fees that may be due to our Account No. 19-0733.
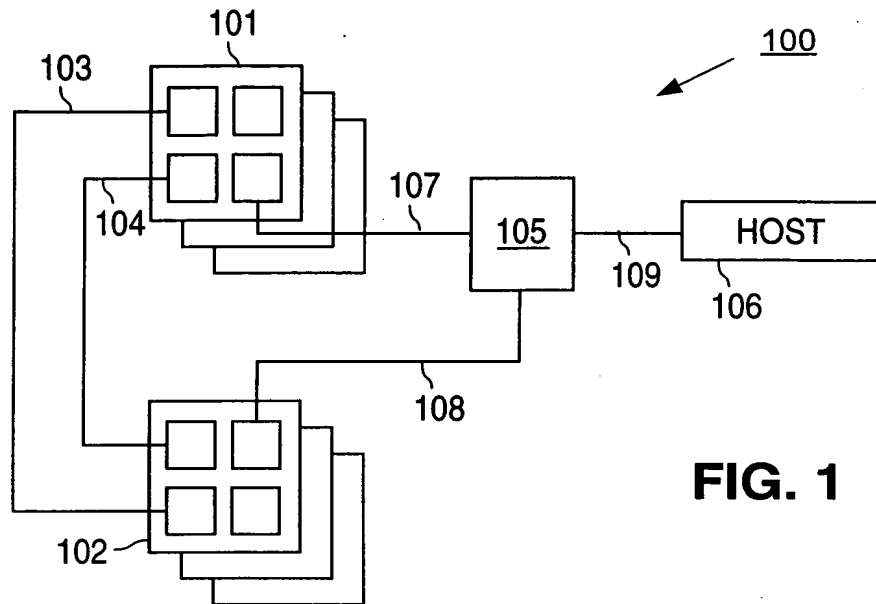
Respectfully submitted,

BANNER & WITCOFF, LTD.

Dated: October 22, 2004   By:

Jordan N. Bodner
Registration No. 42,338

1001 G Street, N.W., 11th Floor
Washington, D.C. 20001
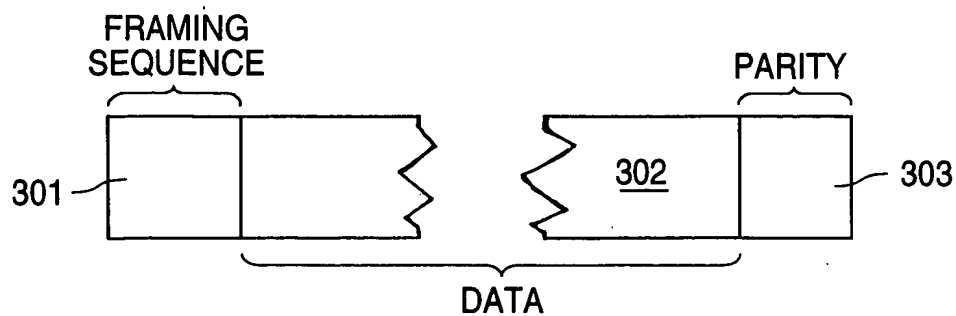Office: (202) 824-3000
Facsimile: (202) 824-3001

APPENDIX

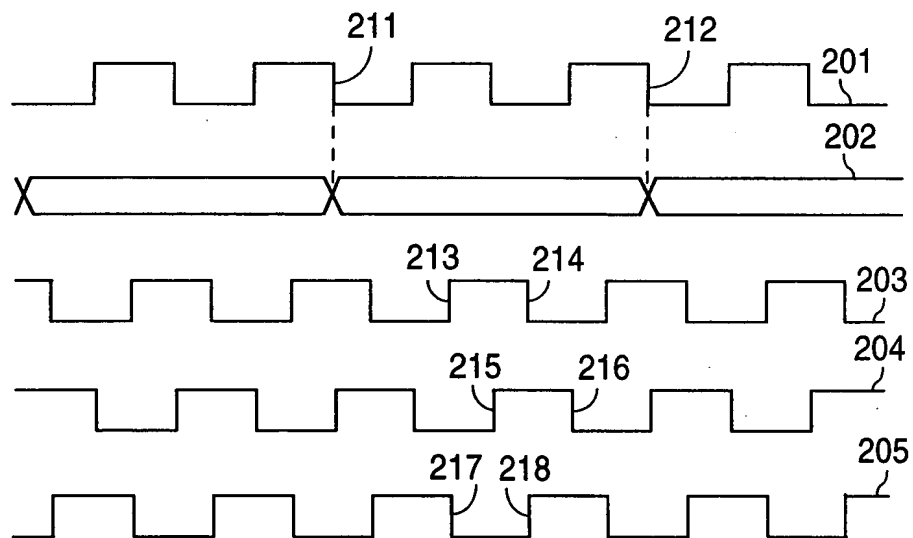U.S. Serial No.: 09/539,463 Atty. Dkt. No.: 003921.00023
Inventor: Charles W. SELVIDGE, et al.
Title: NON-SYNCHRONIZED MULTIPLEX DATA TRANSPORT ACROSS
SYNCHRONOUS SYSTEMS

REPLACEMENT SHEET

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FIG. 1

FIG. 2

FIG. 3

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ANNOTATED SHEET SHOWING CHANGES

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FIG. 1

FIG. 2

FRAMING SEQUENCE

PARITY

DATA

FIG. 3